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CERCOSPORA CHAMÆCRISTA, Ell. & Kellerman.—On leaves and pods of *Cassia chamæcrista*. Manhattan, Kans., October, 1887, Kellerman & Swingle (1126). Hypophyllous; hyphæ loosely fasciculate, coarse, pale brown, sparingly septate, 50—70 x 5—6 *u*, abruptly bent and subnodulose above; spots none, tufts effused and soon spreading over the entire lower surface of the leaf, which then assumes a brown, scorched look; conidia subcylindrical, smoky-hyaline, 1—3-septate and sometimes constricted at the septa, 35—55 x 5—7 *u*.

CERCOSPORA PACHYPUS, E. & E. JOURN. MYCOL., III, p. 104.—A form of what appears to be this species has been found in Kansas (Kellerman & Swingle, No. 1127, on leaves of *Helianthus lenticularis*, having the conidia 1—3-septate, the tufts of hyphæ rather larger and longer and the pallid-yellowish spots at first distinctly visible on both sides of the leaf.

The following may also be added to the list of North American species:

C. IPOMÆÆ, Winter.—Fungi Eur., 3585, on *Ipomœa pandurata*. Missouri (Galloway).

C. HELVOLA, Sacc.—On *Trifolium repens*, at Newfield, N. J.

NEW IOWA FUNGI.

BY J. B. ELLIS AND B. D. HALSTED.

CERCOSPORA LATERITIA, Ell. & Halsted.—On living leaves of *Sambucus pubens*. Ames, Iowa, September, 1887, B. D. Halsted. Hypophyllous, in indefinite, pale, brick-colored patches, which soon become confluent, covering the greater part of the lower surface of the leaf, which is variegated above with brownish spots, which become more or less confluent and darker and finally nearly black; hyphæ coarse, 50—70 x 8—10 *u*, branching and septate, arising in spreading tufts through the stomata of the leaf and more or less interwoven and matted together; conidia mostly cylindrical and straight, with ends obtuse, 2—6-septate and generally constricted at the septa, reddish-brown, 50—80 x 6—8 *u*, occasionally longer (100 *u* or over) and then attenuated above. This is closely allied to *C. ferruginea*, Fckl., and *C. racemosa*, E. & M., but is a coarser species than either of these, though in color and general appearance it much resembles the latter.

CERCOSPORA LYCII, Ell. and Halsted.—On *Lycium vulgare*. Ames, Iowa, September, 1887, B. D. Halsted. Spots amphigenous, yellowish-brown, becoming thin and white in the center, 2—4 millim. in diameter, discoid, with a definite, raised margin; hyphæ mostly epiphyllous, yellowish-brown, paler above, septate, 80—120 x 4 *u*, nearly straight, but more or less shouldered and toothed above, forming erect tufts arising from a small tubercular base; conidia slender, 80—150 x about 4 *u*, hyaline, continuous or faintly 3—4 or more septate.

CERCOSPORA ANOMALA, Ell. & Halsted.—On living leaves of *Actinomeris squarrosa.* Ames, Iowa, August, 1887, B. D. Halsted. Forming indefinite patches on the under side of the leaf, olivaceous at first, becoming black. The leaf also finally shows subindefinite, blackish-brown spots above. The erect, fertile hyphæ, 30—50 x 4—5 *u*, pale olivaceous, arise from prostrate, subhyaline or pale olivaceous, branching, septate threads and bear at their tips the oblong-cylindrical, smoky-hyaline, 20—40 x 4—5 *u* conidia. This has the general aspect of *C. Helianthi*, E. & E., but the hyphæ and conidia are quite different and the species varies from the ordinary type of *Cercospora*, approaching *Cladosporium.*

CERCOSPORA OXYBAPHI, Ell. & Halsted.—On living leaves of *Oxybaphus nyctagineus.* Iowa City, June, 1887, A. S. Hitchcock. Hyphæ amphigenous, pale, short, 25—30 x 3 *u* and crooked, sparingly septate, mostly issuing from the stomata of the leaf in very minute, black, spreading tufts, with a coarsely cellular base. These tufts or fascicles appear in indefinitely-limited groups and are so minute as to be barely visible under the lens. The conidia are filiform-obclavate, 3—4 septate, hyaline, 30—50 x 3 *u.* The leaf soon becomes spotted with rusty-brown, indefinite spots, which are more conspicuous above.

CYLINDROSPORIUM IRIDIS, Ell. & Halsted.—Acervuli very minute and numerous, subcuticular, blackish, forming continuous series or strips between the parallel nerves of the leaf for several cm. in length, the exuded spores appearing like a thin white tomentum on the matrix; spores acicular, continuous, hyaline, 15—22 x 1 *u*; hyphæ short (8—10 x 2 *u*), obscure, mostly toothed above. On living leaves of *Iris.* Iowa City, June, 1887, A. S. Hitchcock.

VERMICULARIA SANGUINEA, Ell. & Halsted.—On leaves of *Panicum* (some introduced European species) in grass plots and lawns. Ames, Iowa, 1887, B. D. Halsted. Spots amphigenous, subelliptical, 2—3 millim. in diameter, at first smaller and purplish-red, becoming larger and black and finally white in the center, the leaf stained purplish-red around the spots; perithecia erumpent, subconcentrically arranged or irregularly scattered, or collected in a compact group in the center of the spots, depressed-globose, open above, beset with straight, black, continuous or sparingly septate, black bristles, 60—90 x 3—3½ *u*; conidia broad, arcuate-fusoid, more acute and narrower above, hyaline, granular and nucleate, 20—22 x about 6 *u.* In its mode of growth and in other respects apparently distinct from the other graminicolous species.

PHOMA VIRGINIANA, Ell. & Halsted.—On leaves of *Prunus Virginiana.* Ames, Iowa, September, 1887. Spots amphigenous, large (½—1 cm.), round, subindefinite, rusty brown above, darker below; perithecia hypophyllous, minute, abundant, erumpent-superficial; sporules oblong-cylindrical, 5—7 x 1½ *u.*